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EXAMINER

HILL, KEVIN KAI

ART UNIT PAPER NUMBER

1633

DATE MAILED: 09/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/815,262	<b>Applicant(s)</b> ENGELHARDT ET AL.	
	<b>Examiner</b> Kevin K. Hill, Ph.D.	<b>Art Unit</b> 1633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-60 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-60 are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

Group I, claims 1-32, and 43-60, drawn to a method of enhancing recombinant adeno-associated virus (rAAV) transduction in mammalian cells, comprising contacting the mammalian cells with at least one agent in an amount effective to additively or synergistically enhance rAAV transduction, classified in class 424, subclass 93.2.

Group II, claims 33-42 and 60, drawn to a method of treating a condition associated with aberrant expression of an endogenous gene product in a mammal at risk of or having the condition, comprising contacting the mammalian cells with at least one agent in an amount effective to additively or synergistically enhance recombinant adeno-associated virus (rAAV) transduction, classified in class 424, subclass 93.2.

Inventions I-II are directed to related processes. The related inventions are distinct if the inventions as claimed do not overlap in scope, i.e., are mutually exclusive; the inventions as claimed are not obvious variants; and the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect. See MPEP § 806.05(j). In the instant case, the Group I method to enhance rAAV transduction in mammalian cells may be performed *ex vivo* or *in vivo* and do not require the cells to be of diseased origin; whereas, Group II is a method of treatment of a mammal having or at risk of having a condition associated, and thus requires *in vivo* administration. The purpose of the Group II method is to treat a mammal having or at risk of having a particular disease; whereas, the purpose of the Group I method is to enhance rAAV transduction in a mammalian cell, which is a distinctly different purpose and yields distinctly different results than the method of treating a mammal for a disease condition. Furthermore, the Group I method includes the transduction of a second rAAV encoding a second functional polypeptide; whereas, no such combinatorial rAAV method steps are extant in the Group II method.

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A search for a method of enhancing recombinant adeno-associated virus (rAAV) transduction in mammalian cells would not be co-extensive with a search for a method of treating a condition in a mammal. Further, a reference rendering a method of enhancing rAAV transduction as anticipated or obvious over the prior art would not necessarily also render a method of treating a condition in a mammal as anticipated or obvious over the prior art. Because these inventions are distinct for reasons given above, and because a search of one does not necessarily overlap with that of another, it would be unduly burdensome for the examiner to search and examine all the subject matter being sought in the presently pending claims and thus, restriction for examination purposes as indicated is proper.

2. **Should Applicant elect Invention I, a further group restriction is required under 35 U.S.C. 121.** Claim 1 recites a plurality of agent interaction effects. Applicant is required to elect a single disclosed agent interaction effect for prosecution on the merits to which the claims shall be restricted. Therefore, election is required of Invention I and one of Invention I, inventive groups (A)-(B) below, specifically:

Group IA, claims 1-32, and 43-60, drawn to a method of enhancing recombinant adeno-associated virus (rAAV) transduction in mammalian cells, comprising contacting the mammalian cells with at least one agent, wherein at least two agents additively enhance rAAV transduction, classified in class 424, subclass 93.2.

Group IB, claims 1-32, and 43-60, drawn to a method of enhancing recombinant adeno-associated virus (rAAV) transduction in mammalian cells, comprising contacting the mammalian cells with at least one agent, wherein at least two agents synergistically enhance rAAV transduction, classified in class 424, subclass 93.2.

Invention I, Groups (A)-(B) are unrelated. Each agent interaction confers a unique, distinctly different effect on the cell which it contacts that are not obvious variations of each other because the additive and synergistic effects are the direct result of the given agents'

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structures and one of ordinary skill in the art cannot predict *a priori* which combination of agents will yield no interactive effect, an additive effect or a synergistic effect.

A search for a combination of agents that additively enhances rAAV transduction would not be co-extensive with a search for a combination of agents that synergistically enhances rAAV transduction. Further, a reference rendering a combination of agents that additively enhances rAAV transduction as anticipated or obvious over the prior art would not necessarily also render a combination of agents that synergistically enhances rAAV transduction as anticipated or obvious over the prior art. Because these inventions are distinct for reasons given above, and because a search of one does not necessarily overlap with that of another, it would be unduly burdensome for the examiner to search and examine all the subject matter being sought in the presently pending claims and thus, restriction for examination purposes as indicated is proper.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed agent interaction effect, even though this requirement is traversed. Failure to elect an agent interaction effect from Invention I, Groups (A)-(B) above consonant with Applicant's elected Invention I, may result in a notice of non-responsive amendment.

3. **Should Applicant elect Invention(s) I and an agent interaction effect from inventive groups (a)-(b) above, a species election is required under 35 U.S.C. 121.** Claim(s) 1 and 43 are generic to an additional agent of specific function. Applicant is required to elect a single disclosed agent functionality recited specifically in Claim(s) 3-4 and 45-46 for prosecution on the merits to which the claims shall be restricted. Therefore, election is required of Invention I and one of Invention I, inventive groups (a)-(b) above and an additional agent of specific function, specifically:

- i) an agent that alters single strand to double strand rAAV genome conversion, as recited in Claims 3 and 45, or
- ii) an agent that alters cellular uptake of rAAV, as recited in Claims 4 and 46.

The agent species of specific function are unrelated. Each agent cell biology functionality category confers a unique, distinctly different effect on the cell which it contacts that are not obvious variations of each other because one skilled in the art does not expect an agent that alters single strand to double strand rAAV genome conversion to have the same chemical and physiological properties to enhance rAAV transduction of a mammalian cell as an agent that alters cellular uptake of rAAV, for example. The cell biological processes described in these inventive functional groups are distinctly different. One of ordinary skill in the art could readily consult any cell biology reference textbook (e.g., Molecular Biology of the Cell, Alberts et al., Garland Publishing) describing the structure, characteristics and biological properties for each of the cell biological processes to be affected by a given agent, and would appreciate that based on such reference disclosures alone or in combination, that these agent functionalities are distinct and separate.

A search for an agent that alters single strand to double strand rAAV genome conversion would not be co-extensive with a search for an agent that alters cellular uptake of rAAV. Further, a reference rendering an agent that alters cellular uptake of rAAV as anticipated or obvious over the prior art would not necessarily also render an agent that alters single strand to double strand rAAV genome conversion as anticipated or obvious over the prior art. Because these inventions are distinct for reasons given above, and because a search of one does not necessarily overlap with that of another, it would be unduly burdensome for the examiner to search and examine all the subject matter being sought in the presently pending claims and thus, restriction for examination purposes as indicated is proper.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed agent functionality species, even though this requirement is traversed. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election. Failure to elect a agent functionality species consonant with Applicant's elected invention may result in a notice of non-responsive amendment.

**Should Applicant elect any of Inventions I or II, a species election is required under 35 U.S.C. 121.** Claims 1 and 33 are generic to a plurality of disclosed patentably distinct cell biological functionalities associated with an agent. Furthermore, Claim 43 recites a plurality of disclosed patentably distinct cell biological functionalities associated with an agent that prohibits proper examination of this claim. Therefore, election is required of a first patentably distinct agent cell biology functionality category consonant with Applicant's elected invention for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable wherein the agent, specifically:

- iii) modulates microfilaments or microtubules, as recited in Claims 25 and 51,
- iv) alters cellular uptake of rAAV, as recited in Claims 26, 43 and 52,
- v) modulates rAAV trafficking in the cell, as recited in Claims 27, 43 and 53,
- vi) modulates rAAV processing in the cell, as recited in Claims 28, 43 and 54,
- vii) modulates rAAV nucleic acid degradation in the cell, as recited in Claims 29, 43 and 55,
- viii) modulates rAAV protein degradation in the cell, as recited in Claims 30, 43 and 56;
- ix) modulates rAAV transport to the nucleus, as recited in Claims 31, 43 and 57,
- x) modulates viral genome transport to the nucleus, as recited in Claims 32, 43 and 58,
- xi) is not an inhibitor of proteasome proteolytic activity, as recited in Claim 43, or
- xii) modulates subcellular localization of proteasomes, as recited in Claim 59.

Note: Claim 1 recites the method step comprising contacting the mammalian cell with at least two agents. Therefore, after election of the first agent cell biology functionality category from (iii)-(xii) above, election is required of a second patentably distinct agent cell biology functionality category from (iii)-(xii) above, as recited in Claims 25-32, consonant with Applicant's elected invention for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Each agent cell biology functionality category confers a unique, distinctly different effect on the cell which it contacts that are not obvious variations of each other because one skilled in the art does not expect an agent that alters single strand to double strand rAAV genome

conversion to have the same chemical and physiological properties to enhance rAAV transduction of a mammalian cell as an agent that modulates the subcellular localization of proteasomes, for example. The cell biological processes described in these inventive functional groups are distinctly different. One of ordinary skill in the art could readily consult any cell biology reference textbook (e.g., Molecular Biology of the Cell, Alberts et al., Garland Publishing) describing the structure, characteristics and biological properties for each of the cell biological processes to be affected by a given agent, and would appreciate that based on such reference disclosures alone or in combination, that these agent functionalities are distinct and separate.

A search for an agent that modulates microfilaments or microtubules would not be co-extensive with a search for an agent that modulates rAAV trafficking in a cell. Further, a reference rendering an agent that alters cellular uptake of rAAV as anticipated or obvious over the prior art would not necessarily also render an agent that modulates rAAV transport to the nucleus as anticipated or obvious over the prior art. Similarly, a finding that an agent that modulates viral genome transport to the nucleus was novel and unobvious over the prior art would not necessarily extend to a finding that an agent that modulates rAAV protein degradation in the cell was also novel and unobvious over the prior art. Because these inventions are distinct for reasons given above, and because a search of one does not necessarily overlap with that of another, it would be unduly burdensome for the examiner to search and examine all the subject matter being sought in the presently pending claims and thus, restriction for examination purposes as indicated is proper.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed cell biology functionality category species, even though this requirement is traversed. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election. Failure to elect a cell biology functionality category species consonant with Applicant's elected invention may result in a notice of non-responsive amendment.



**Should Applicant elect any of Inventions I or II and a disclosed cell biology functionality category species from (iii)-(xii) above, a further species election is required**

**under 35 U.S.C. 121.** Claims 1 and 43 are generic to a plurality of agent categories.

Furthermore, Claims 8, 33 and 47 are directed to a plurality of disclosed, patentably distinct agent categories of distinctly different biological functionality that prohibit proper examination of these claims. Therefore, election is required under 35 U.S.C. 121 of any of Inventions I or II and a disclosed cell biology functionality category species from (i)-(x) above and a first agent category from the list consisting of the compounds recited in Claims 8, 33 and 47 consonant with Applicant's elected invention of the disclosed cell biology functionality category species from (iii)-(xii) above for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable, specifically:

- xiii) is an antibiotic, as recited in Claims 8, 33, and 47,
- xiv) is a chemotherapeutic, as recited in Claims 8, 33, and 47,
- xv) is a lipid-lowering compound, as recited in Claims 8, 33, and 47, or
- xvi) is a food additive, as recited in Claims 8, 33, and 47.

**Note:** Claim 1 recites the method step comprising contacting the mammalian cell with at least two agents. Therefore, after election of the first agent from the list consisting of the compounds recited in Claims 8, 33 and 47, election is required of a second patently distinct agent from the list consisting of the compounds recited in Claim 8 consonant with Applicant's elected invention for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Each agent category confers a unique, distinctly different effect on the cell which it contacts that are not obvious variations of each other because one skilled in the art does not expect food additives such as alpha tocopherol to have the same chemical and physiological properties to enhance rAAV transduction of a mammalian cells and/or to treat a condition associated with aberrant expression of an endogenous gene product as chemotherapeutics such as suramin or 5-fluorouracil, for example. The cell biological processes described in these inventive functional groups are distinctly different. One of ordinary skill in the art could readily consult

any cell biology reference textbook (e.g., Molecular Biology of the Cell, Alberts et al., Garland Publishing) describing the structure, characteristics and biological properties for each of the cell biological processes to be affected by a given agent, and would appreciate that based on such reference disclosures alone or in combination, that these agent functionalities are distinct and separate.

A search for a food additive would not be co-extensive with a search for an antibiotic. Further, a reference rendering a chemotherapeutic as anticipated or obvious over the prior art would not necessarily also render a lipid-lowering compound as anticipated or obvious over the prior art. Similarly, a finding that a food additive was novel and unobvious over the prior art would not necessarily extend to a finding that a chemotherapeutic was also novel and unobvious over the prior art. Because these inventions are distinct for reasons given above, and because a search of one does not necessarily overlap with that of another, it would be unduly burdensome for the examiner to search and examine all the subject matter being sought in the presently pending claims and thus, restriction for examination purposes as indicated is proper.

Applicant is required under 35 U.S.C. 121 to elect a disclosed biological and physiological agent category species, even though this requirement is traversed. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election. Failure to elect a biological and physiological agent category species consonant with Applicant's elected invention may result in a notice of non-responsive amendment.

**Should Applicant elect any of Inventions I or II and a disclosed cell biology functionality category species from (iii)-(xii) above and a first agent category and a second agent category as per Claim 1, from (xiii)-(xvi) above consonant with Applicant's elected invention, a further species election is required under 35 U.S.C. 121.** Claims 21 and 60 are directed to a plurality of disclosed, patentably distinct agents of distinctly different biological functionality that prohibit proper examination of these claims. Therefore, election is required under 35 U.S.C. 121 of an agent from the list consisting of the compounds recited in Claims 21

and 60 consonant with Applicant's elected invention for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

**Note:** Claim 1 recites the method step comprising contacting the mammalian cell with at least two agents. Therefore, after election of the first agent from the list consisting of the compounds recited in Claims 21 and 60, election is required of a second patently distinct agent from the list consisting of the compounds recited in Claim 21 consonant with Applicant's elected invention for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Each agent possesses an independent and distinctly different structure and confers a unique, distinctly different effect on the cell which it contacts that are not obvious variations of each other because one skilled in the art does not expect food additives such as tannic acid to have the same chemical properties as chemotherapeutics such as cisplatin, for example. The recited agent compounds are independent molecules that possess distinctly different structures, yield different effects and are mutually exclusive of the other compounds. One of ordinary skill in the art could readily consult any reference manual (e.g., Merck Index, Physician's Desk Reference, the Red Book, Goodman & Gillman) or the U.S. Pharmacopeia ([www.USP.org](http://www.USP.org)) describing the structure, solubility characteristics, biological properties and/or contraindications for each of the recited agents, and would appreciate that based on these reference disclosures alone or in combination, that these agents are distinct and separate.

A search for doxorubicin would not be co-extensive with a search for tannic acid. Further, a reference rendering cisplatin as anticipated or obvious over the prior art would not necessarily also render simvastatin as anticipated or obvious over the prior art. Similarly, a finding that epoxomicin was novel and unobvious over the prior art would not necessarily extend to a finding that camptothecin was also novel and unobvious over the prior art. Because these inventions are distinct for reasons given above, and because a search of one does not necessarily overlap with that of another species, it would be unduly burdensome for the examiner to search and examine all the subject matter being sought in the presently pending claims and thus, restriction for examination purposes as indicated is proper.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed agent species, even though this requirement is traversed. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election. Failure to elect an agent species consonant with Applicant's elected invention may result in a notice of non-responsive amendment.

**Should Applicant elect any of Inventions I or II, a species election is required under 35 USC 121.** Currently, Claims 16 and 48, of this application recite a plurality of disclosed patentably distinct cell types of distinctly different biological functionality that prohibit proper examination of the claims. Therefore, election is required under 35 U.S.C. 121 of one cell type from the list consisting of the cells recited in Claims 16 and 48 consonant with Applicant's elected invention for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

The cell type species developmentally and functionally distinct, possess different structures, as in the complement of nucleic acids and proteins synthesized by the respective cell types that makes manifest their developmental and biological distinctiveness. One of ordinary skill in the art could readily consult any cell biology reference textbook (e.g., *Molecular Biology of the Cell*, Alberts et al., Garland Publishing) describing the structure, characteristics and biological properties for each of the recited cell types and would appreciate that based on such reference disclosures alone or in combination, that these cell types are distinct and separate. Furthermore, the methods encompass both *ex vivo* and *in vivo* transduction of the recombinant AAV, and thus the method steps to administer the rAAV and agents *in vivo* to lung cells are distinctly different and yield distinctly different results than delivery means to the liver, for example.

A search for an epithelial cell would not be co-extensive with a search for a hematopoietic cell. Further, a reference rendering a lung cell as anticipated or obvious over the prior art would not necessarily also render a neuronal cell as anticipated or obvious over the prior art. Similarly, a finding that a heart cell was novel and unobvious over the prior art would not

necessarily extend to a finding that a liver cell was also novel and unobvious over the prior art. Because these inventions are distinct for reasons given above, and because a search of one does not necessarily overlap with that of another species, it would be unduly burdensome for the examiner to search and examine all the subject matter being sought in the presently pending claims and thus, restriction for examination purposes as indicated is proper.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed cell type species, even though this requirement is traversed. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election. Failure to elect a polypeptide species consonant with Applicant's elected Invention may result in a notice of non-responsive amendment.

**Should Applicant elect any of Inventions I or II, a species election is required under 35 USC 121.** Currently, Claims 20 and 42, of this application recite a plurality of disclosed patentably distinct species comprising polypeptides of distinctly different biological functionality that prohibit proper examination of the claims. Therefore, election is required under 35 U.S.C. 121 of one polypeptide species from the list consisting of the compounds recited in Claims 20 and 42 consonant with Applicant's elected invention for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

**Note:** Claim 10 recites the method step further comprising a second rAAV. Therefore, after election of the first functional polypeptide encoded by the first rAAV, election is required of a second patently distinct agent functional polypeptide encoded by the second rAAV, as recited in Claim 20, consonant with Applicant's elected invention for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

The recited polypeptides are independent molecules that possess distinctly different structures, yield different effects and are mutually exclusive of the other polypeptides. Each of the encoded polypeptides performs distinctly different functions in a given cell type, as

evidenced by the etiologically and symptomatically different pathologies in patients suffering disease caused by mutation in the respective genes encoding the recited polypeptides.

A search for cystic fibrosis transmembrane conductance regulator would not be co-extensive with a search for  $\beta$ -globin. Further, a reference rendering  $\gamma$ -globin as anticipated or obvious over the prior art would not necessarily also render tyrosine hydroxylase as anticipated or obvious over the prior art. Similarly, a finding that glucocerebrosidase was novel and unobvious over the prior art would not necessarily extend to a finding that dystrophin was also novel and unobvious over the prior art. Because these inventions are distinct for reasons given above, and because a search of one does not necessarily overlap with that of another species, it would be unduly burdensome for the examiner to search and examine all the subject matter being sought in the presently pending claims and thus, restriction for examination purposes as indicated is proper.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed polypeptide species, even though this requirement is traversed. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election. Failure to elect a polypeptide species consonant with Applicant's elected Invention may result in a notice of non-responsive amendment.

Should Applicant traverse on the ground that the species are not patentably distinct, Applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin K. Hill, Ph.D. whose telephone number is 571-272-8036. The examiner can normally be reached on Monday through Friday, between 9:00am-6:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave T. Nguyen can be reached on 571-272-0731. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



**DAVE TRONG NGUYEN**  
**SUPERVISORY PATENT EXAMINER**